




# UNITED STATES PATENT AND TRADEMARK OFFICE

  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/688,588

10/18/2003

Robert Kincaid

10031032-1

2257

22878

7590

05/08/2006

AGILENT TECHNOLOGIES, INC.

INTELLECTUAL PROPERTY ADMINISTRATION, LEGAL DEPT.

P.O. BOX 7599

M/S DL429

LOVELAND, CO 80537-0599

EXAMINER

SIMS, JASON M

ART UNIT

PAPER NUMBER

1631

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/688,588

**Applicant(s)**

KINCAID, ROBERT

**Examiner**

Jason M. Sims

**Art Unit**

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-64 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-22, 40-50, and 56-60, drawn to a system, computer readable memory, and a method of displaying and manipulating data to facilitate identification, trends, correlations or other useful relationships among including a step of reordering an arrangement of rows in a matrix, classified in class 702, subclass 20. If this group is elected, then the below summarized three specie elections are also required
- II. Claims 23-37, 51-55, and 61-64, drawn to a system, computer readable memory, and a method of displaying and manipulating data to facilitate identification, trends, correlations or other useful relationships among the data including a step of reordering particular rows using a specific criteria, classified in class 702, subclass 20. If this group is elected, then the below summarized specie election is also required.
- III. Claim 38, drawn to a method of displaying and manipulating data to facilitate identification, trends, correlations or other useful relationships among the data including a step of reordering columns of data, classified in class 702, subclass 20.
- IV. Claim 39, drawn to a method of displaying and manipulating data to facilitate identification, trends, correlations or other useful relationships among the data including a step of entities and displaying the graphical representations, classified in class 702, subclass 20.

Art Unit: 1631

Inventions I-IV are directed to related subject matter of manipulating data. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, groups I-IV are drawn to methods of displaying and manipulating data, but involve unique method steps. For instance, group I method involves a step for reordering the order of arrangement of the rows of data in the  $n \times m$  matrix. The group II method involves a step of reordering the order of arrangement of the first  $x$  rows of data in the  $n \times m$  matrix wherein  $x$  is less than or equal to  $m$  and is a preset positive integer. The group III method involves a step of reordering the order arrangement of the columns of data in the  $n \times m$  matrix and displaying  $c$  columns. The group IV method involves a step for reordering the order of arrangement of entities in the  $n \times m$  matrix and displaying the first  $c \times d$  graphical representations of the identified data items.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

***One of Three Group I Election of Species***

This application contains claims directed to the following patentably distinct species of determining a distance value: squared Euclidean distance and Pearson correlation coefficient relative to the two vectors.

The species are independent or distinct because the species as claimed are either not capable of use together or have a materially different design, mode of operation, function, or effect.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, claims 1-13, 16-22, 40-50, and 56-60 are generic to the above listed distance species.

***Two of Three Group I Election of Species***

This application contains claims directed to the following patentably distinct species of a value for de-emphasizing: a null value and a negative pseudo-data value.

The species are independent or distinct because the species as claimed are either not capable of use together or have a materially different design, mode of operation, function, or effect.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, claims 1-20, 40-50, and 56-60 are generic to the above listed value for de-emphasizing species.

***Three of Three Group I Election of Species***

This application contains claims directed to the following patentably distinct species of generating said pseudo-data vector: arbitrary data values and values inputted by a user.

The species are independent or distinct because the species as claimed are either not capable of use together or have a materially different design, mode of operation, function, or effect.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, claims 1-15, 18-22, 40-47, 50, and 56-60 are generic to the above generation of pseudo-data vector species.

### ***Group II Election of Species***

This application contains claims directed to the following patentably distinct species of determining a distance value: squared Euclidean distance and Pearson correlation coefficient relative to the two vectors.

The species are independent or distinct because the species as claimed are either not capable of use together or have a materially different design, mode of operation, function, or effect.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, claims 23-30, 34-35, 51-55, and 61-64, are generic to the above distance species.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Sims, whose telephone number is (571)-272-7540.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Ardin Marschel can be reached via telephone (571)-272-0718.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the Central PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The Central PTO Fax Center number is (571)-273-8300.

Any inquire of a general nature or relating to the status of this application should be directed to Legal Instrument Examiner, Tina Plunkett, whose telephone number is (571)-272-0549.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Ardin H. Marschel 4/30/06*  
**ARDIN H. MARSCHEL**  
**SUPERVISORY PATENT EXAMINER**